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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/511,213	10/13/2004	Petrus Henricus Cornelius Bentvelsen	NL 020306	2125

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PHILIPS INTELLECTUAL PROPERTY & STANDARDS
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EXAMINER

JONES, CRYSTAL L

ART UNIT PAPER NUMBER

2627

DATE MAILED: 03/29/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.		Applicant(s)	
	10/511,213		BENTVELSEN ET AL.	
	Examiner		Art Unit	
	Crystal Jones		2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 October 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☒ Claim(s) 9 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 October 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

2. The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT
- (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC (See 37 CFR 1.52(e)(5) and MPEP 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text are permitted to be submitted on compact discs.) or
REFERENCE TO A "MICROFICHE APPENDIX" (See MPEP § 608.05(a). "Microfiche Appendices" were accepted by the Office until March 1, 2001.)
- (f) BACKGROUND OF THE INVENTION.
 - (1) Field of the Invention.

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(2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.

(g) BRIEF SUMMARY OF THE INVENTION.

(h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).

(i) DETAILED DESCRIPTION OF THE INVENTION.

(j) CLAIM OR CLAIMS (commencing on a separate sheet).

(k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).

(l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

Claim Objections

3. Claim 9 is objected to because of the following informalities: On line 1 of claim 9 "or" should be changed to --are--. Appropriate correction is required.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claim 10 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. A computer program serves as "functional descriptive material" and is thus non-statutory. Claim 10 is drawn to a "program" *per se* as recited in the preamble and as such is non-statutory subject matter. See MPEP § 2106.IV.B.1.a. Data structures not claimed as embodied in computer readable media are descriptive material *per se* and are not statutory because they are not capable of causing functional change in the computer. See, e.g., *Warmerdam*, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure *per se* held nonstatutory). Such claimed data structures do not define any structural and functional interrelationships between the data structure and other claimed aspects of the invention, which permit the data structure's

functionality to be realized. In contrast, a claimed computer readable medium encoded with a data structure defines structural and functional interrelationships between the data structure and the computer software and hardware components which permit the data structure's functionality to be realized, and is thus statutory. Similarly, computer programs claimed as computer listings *per se*, i.e., the descriptions or expressions of the programs are not physical "things." They are neither computer components nor statutory processes, as they are not "acts" being performed. Such claimed computer programs do not define any structural and functional interrelationships between the computer program and other claimed elements of a computer, which permit the computer program's functionality to be realized.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claim 4 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Regarding claim 4, page 2, lines 19-21, 24-26, 31 and 32 disclose the claimed method wherein a discontinuity appears at predetermined positions in the lead-in area. As such, there is no disclosure of how to make and use the claimed method, wherein at least one discontinuity only appears at predetermined positions in the lead-out area and/or

program area of an optical record carrier. Hence, there would be undue experimentation.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1 and 4-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Heylen et al. (WO 01/61695).

Regarding claims 1 and 10, Heylen et al. disclose a method/program of copy detection of a record carrier wherein time stamps are assigned to information blocks stored on said record carrier (see Fig. 6b), characterized in that the timing of said time stamps assigned to subsequent information blocks comprises at least one discontinuity (see discontinuities of Figs. 7-10) and that said at least one discontinuity is used to encode user information (Page 1, lines 30 and 31).

Regarding claim 4, Heylen et al. disclose a method according to claim 1, wherein said at least one discontinuity only appears at predetermined positions in the lead-in area lead-out area and/or program area of an optical record carrier (discontinuities within Q-subchannel and inherently must be in the lead-in, lead-out, and/or program area).

Regarding claim 5, Heylen et al. disclose a method according to claim 1, wherein different types of discontinuities are applied for different pieces of content stored on a record carrier (see Figs. 7-10).

Regarding claim 6, Heylen et al. disclose a method of read-out of a record carrier wherein time stamps are assigned to information blocks stored on said record carrier such that the timing of said time stamps assigned to subsequent information blocks comprises at least one discontinuity and that said at least one discontinuity is used to encode user information, comprising the steps of: reading said time stamps from said record carrier, and decoding said time stamps to obtain said user information encoded therein (Page 12, lines 27-34).

Regarding claim 7, Heylen et al. disclose an apparatus for copy detection of a record carrier wherein time stamps are assigned to information blocks stored on said record carrier, characterized by means for assigning said time stamps to subsequent information blocks such that the timing of said time stamps comprises at least one discontinuity and by means for encoding user information into said at least one discontinuity (Data is encoded according to claim 1, therefore an apparatus is inherently present to perform the aforementioned method).

Regarding claim 8, Heylen et al. disclose an apparatus for read-out of a record carrier wherein time stamps are assigned to information blocks stored on said record carrier such that the timing of said time stamps assigned to subsequent information blocks comprises at least one discontinuity and that said at least one discontinuity is used to encode user information, comprising: means for reading said time stamps from

said record carrier, and means for decoding said time stamps to obtain said user information encoded therein (Fig. 11).

Regarding claim 9, Heylen et al. disclose a record carrier wherein time stamps are assigned to information blocks stored on said record carrier, characterized in that the timing of said time stamps assigned to subsequent information blocks comprises at least one discontinuity (Page 2, lines 31-33) and that into said at least one discontinuity is user information is encoded (Page 1, lines 30 and 31).

7. Claims 1-4 and 6-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Sollish (U.S. Patent 6,104,679).

Regarding claim 1, Sollish discloses a method of copy detection of a record carrier wherein time stamps are assigned to information blocks stored on said record carrier (see Fig. 3), characterized in that the timing of said time stamps assigned to subsequent information blocks comprises at least one discontinuity (Fig. 5; discontinuity between absolute time of 3 minutes 40 seconds and 3 minutes 42 seconds) and that said at least one discontinuity is used to encode user information (Col. 5, lines 33-37).

Regarding claim 2, Sollish discloses a method according to claim 1, wherein said at least one discontinuity is used to encode a unique identifier uniquely identifying said record carrier (Col. 5, lines 56-61).

Regarding claim 3, Sollish discloses a method according to claim 2, wherein said unique identifier is stored in the subcode Q-channel, particularly of an optical recording system for read-only optical discs (Col. 5, lines 33-37).

Regarding claim 4, Sollish discloses a method according to claim 1, wherein said at least one discontinuity only appears at predetermined positions in the lead-in area

lead-out area and/or program area of an optical record carrier (discontinuities within Q-subchannel and inherently must be in the lead-in, lead-out, and/or program area).

Regarding claim 6, Sollish discloses a method of read-out of a record carrier wherein time stamps are assigned to information blocks stored on said record carrier such that the timing of said time stamps assigned to subsequent information blocks comprises at least one discontinuity and that said at least one discontinuity is used to encode user information, comprising the steps of: reading said time stamps from said record carrier, and decoding said time stamps to obtain said user information encoded therein (Fig. 11).

Regarding claim 7, Sollish discloses an apparatus for copy detection of a record carrier wherein time stamps are assigned to information blocks stored on said record carrier, characterized by means for assigning said time stamps to subsequent information blocks such that the timing of said time stamps comprises at least one discontinuity and by means for encoding user information into said at least one discontinuity (Data is encoded according to claim 1, therefore an apparatus is inherently present to perform the aforementioned method).

Regarding claim 8, Sollish discloses an apparatus for read-out of a record carrier wherein time stamps are assigned to information blocks stored on said record carrier such that the timing of said time stamps assigned to subsequent information blocks comprises at least one discontinuity and that said at least one discontinuity is used to encode user information, comprising: means for reading said time stamps from said record carrier, and means for decoding said time stamps to obtain said user information

encoded therein (Data is read according to claim 6, therefore an apparatus is inherently present to perform the aforementioned method).

Regarding claim 9, Sollish discloses a record carrier wherein time stamps or assigned to information blocks stored on said record carrier, characterized in that the timing of said time stamps assigned to subsequent information blocks comprises at least one discontinuity and that into said at least one discontinuity is user information is encoded (Col. 6, lines 1-3).

Regarding claim 10, Sollish discloses a computer program for implementing the method of claim 1 comprising program code means for causing a computer to perform the steps of the method as claimed in claim 1 when said computer program is run on a computer (see Fig. 10; Sollish discloses a program code to perform the method as claimed in claim 1).

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Alcalay et al. (WO 01/80546).

Alcalay et al. disclose a method in which data is recorded onto a storage medium to prevent unauthorized copying by altering data in the sub-code Q channel so that undesirable conditions occur during playback of a copied disk.

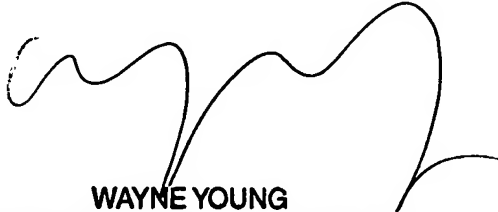
9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Crystal Jones whose telephone number is 571-272-2849. The examiner can normally be reached on Monday through Friday, 8:30 a.m. to 6 p.m..

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wayne Young can be reached on 571-272-7582. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CJ



WAYNE YOUNG
SUPERVISORY PATENT EXAMINER